

WHAT IS CLAIMED IS:

1. A method of lubricating a surface coated with a diamond-like carbon film or coating which comprises supplying to said surface a lubricating oil composition comprising an oil of lubricating viscosity and an effective friction reducing amount of an oil-soluble organo-molybdenum compound.
2. The method of claim 1 wherein the organo-molybdenum compound is present in the lubricating oil composition in an amount of 25 to 1000 ppm of elemental molybdenum, based on the mass of the lubricating oil composition.
3. The method of claim 1 wherein the molybdenum compound is a molybdenum dithiocarbamate.
4. The method of claim 1 wherein the molybdenum compound is a trinuclear molybdenum compound.
5. The method of claim 4 wherein the molybdenum compound is a trinuclear molybdenum compound.
6. The method of claim 3 wherein the molybdenum compound is present in the lubricating oil composition in an amount of 25 to 1000 ppm of elemental molybdenum, based on the mass of the lubricating oil composition.
7. The method of claim 4 wherein the molybdenum compound is present in the lubricating oil composition in an amount of 25 to 1000 ppm of elemental molybdenum, based on the mass of the lubricating oil composition.
8. The method of claim 5 wherein the molybdenum compound is present in the lubricating oil composition in an amount of 25 to 1000 ppm of elemental molybdenum, based on the mass of the lubricating oil composition.

9. The method of claim 1 wherein the lubricating oil composition further comprises one or more additional additives selected from the group consisting of ashless dispersants, metal detergents, corrosion inhibitors, metal dihydrocarbyl dithiophosphates, antioxidants, pour point depressants, anti-foaming agents, additional friction modifiers, antiwear agents and viscosity modifiers.

10. The method of claim 1 wherein the coated surface is that of a component part of an internal combustion engine, and the lubricating oil composition is supplied to the engine.

11. An internal combustion engine having one or more component parts coated with a diamond-like carbon film or coating, and, contained in a reservoir of the engine, a lubricating oil composition for lubricating said parts comprising an oil of lubricating viscosity and an effective friction-reducing amount of an oil-soluble organo-molybdenum compound.

12. The engine of claim 11 which is a spark-ignited or compression-ignited two-stroke or four-stroke internal combustion engine.

13. The engine of claim 11 wherein the organo-molybdenum compound is present in the lubricating oil composition in an amount of 25 to 1000 ppm of elemental molybdenum, based on the mass of the lubricating oil composition.

14. The engine of claim 11 wherein the organo-molybdenum compound is a molybdenum dithiocarbamate.

15. The engine of claim 11 wherein the organo-molybdenum compound is a trinuclear molybdenum compound.

16. The engine of claim 11 wherein the lubricating oil composition further comprises one or more additional additives selected from the group consisting of ashless dispersants, metal detergents, corrosion inhibitors, metal dihydrocarbyl

dithiophosphates, antioxidants, pour point depressants, anti-foaming agents, additional friction modifiers, antiwear agents and viscosity modifiers.